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ABSTRACT

In the study reported here, teachers were given a 5th grade student's report card to which was attached a photo of either an attractive boy, an unattractive boy, an attractive girl, or an unattractive girl. Teachers completed an opinion sheet indicating their best estimate of: (1) the child's IQ; (2) his peer relationships; (3) the parents' interest in the child's academic achievements; and (4) the student's potential educational attainments. Results show that, on all 4 dependent measures, teacher expectations are significantly higher for the attractive child than for the unattractive child. In the concluding discussion, the author presents some implications of her findings and suggests to teachers that they make a conscious effort to compensate for this "natural" bias against less attractive children. (Author/TL)

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THE EFFECT OF PHYSICAL ATTRACTIVENESS ON TEACHER EXPECTATION

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July 1971

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SUMMARY

Teachers were given a 5th grade student's report card to which was attached a photo of either an attractive boy, an unattractive boy, an attractive girl or an unattractive girl. The teachers then completed an opinion sheet indicating their best estimate of 1) the child's IQ, 2) his Peer Relationships, 3) the Parents' Interest in the child's academic achievements and 4) the student's Future Educational attainments. The results indicated that on all four dependent measures teacher expectations are significantly higher ($p < .01$) for the attractive child than for the unattractive child.

INTRODUCTION

In 1968, Rosenthal and Jacobson made a startling discovery: they found that a teacher's expectations as to how a child would behave had an enormous impact on how the child did behave. The authors conducted their experiment in a public elementary school in California. Students in the first through the sixth grades were given a standard IQ test. Teachers were told that this test measured "intellectual blooming." It presumably identified children who were likely to show a marked intellectual "spurt" during the year. The researchers then chose 20% of the children at random, and informed their teachers that their test scores had identified these children as very special children, who would "bloom" within the next year. One year after this deception had occurred, the same IQ test was administered to all children for the second time.

The results revealed that the teachers' expectations did indeed have an enormous impact on students' performance. The supposed "bloomers" showed far more improvement in IQ than did the other youngsters; gains were especially pronounced for first and second graders who had been labeled "bloomers." What could account for such a phenomenon? Rosenthal speculated that teachers were probably more encouraging and friendly to those children whom they expected to "bloom." Their expectations thus served as a self-fulfilling prophesy.

Critical reviews of this particular study and similar research are available (Barber & Silver, 1968 a & b; Thorndike, 1968 & 1969; Gephart, 1969; Snow, 1969; Fleming & Anttonen, 1971). But the issues being challenged are typically methodology, procedure, and analysis rather than the existence of a relationship between expectations and related behavior.

Social psychologists have repeatedly demonstrated that an individual's first impressions of another person affect his subsequent interactions (Daily, 1952; Newcomb, 1947) and that one's expectations influence one's behavior (Zajonc & Brickman, 1969; Brock & Edelman, 1965; Aronson & Carlsmith, 1962). Educational psychologists have also demonstrated relationships between teacher's attitudes and student performance (Kranz, 1970; Palardy, 1969; Rist, 1970). Given the consistency of these results, it is obvious that the identification of variables which affect early attitude formation is important.

Two of the most common sources of information from which a teacher can form a first impression of a student are a school record and the child's appearance. This study was designed to examine the latter variable, while holding the former constant. Specifically, our experiment was designed to determine what effect a student's physical attractiveness has on a teacher's expectations of a child's intellectual and social behavior.

Predictions:

We expected that attractiveness would strongly influence teachers' judgments concerning both the intellectual and social behavior of a child. The more attractive the child, the more biased in his favor we expected teachers to be.

Overview:

The design required to test our hypotheses is a simple one: teachers should be given a standardized report card and an attached photograph. On the basis of this information, teachers should be asked to state expectations related to the educational and social potential of the student. The attractiveness of the photo would be experimentally varied. The report card should include an assessment of academic performance as well as general social behavior.

METHOD

Subjects

Five hundred and four elementary principals were selected from the school directory for the state of Missouri. To insure independence of observations and increased generalizability, one principal per district was chosen. More than 80% of the state's districts were represented in the sample.

Materials

The Student's Summary Record: The first item was a fifth grade student's report card with a photograph attached. This record was scored with an S-U (satisfactory-unsatisfactory) scale and provided a fair amount of information: It itemized tha student's absences during the school year. It reported his grades (during six grading periods) in the content areas of reading, language, arithmetic, social studies, science, art, music, and physical education. Finally, it reported his grades in three personal trait areas (healthful living, personal development, and work habits and attitudes). The report card was filled out for an above average student, who had presumably received a total of 28 "S+," 34 "S," 4 "S-," and no "U's."

Photographs: Twenty educators independently rated a collection of school photographs obtained from fifth grade teachers. On the basis of these ratings, twelve photographs were selected--three pictures of attractive boys, three attractive girls, three unattractive boys and three unattractive girls. Twelve different pictures were used to increase the generalizability of any findings. In addition, we did not wish such extraneous effects which might result from factors such as sex, hair length, chubbiness, and glasses, to be confounded with attractiveness. The wide selection of pictures helped us to avoid this problem.

Opinion Sheet: The opinion sheet consisted of the following four items:

1. I would estimate that the child has an IQ of

   ☐ 96-100 ☐ 101-105 ☐ 106-110 ☐ 111-115

   ☐ 116-120 ☐ 121-125 ☐ 126-130

2. I would speculate that the child's social relationships with classmates are:

   ☐ very good ☐ good ☐ okay ☐ bad ☐ very bad

3. I would guess that the parent's attitude toward school is one of

   ☐ strong interest ☐ moderate interest ☐ slight interest

   ☐ slight indifference ☐ moderate indifference ☐ strong indifference

4. I would predict that the student would continue school through

   ☐ 2 yrs. H.S. ☐ 4 yrs. H.S. ☐ 2 yrs. Col. (or equiv.) ☐ 4 yrs. Col.

   ☐ 1 yr. Grad. School ☐ Masters ☐ Ph.D.

At the bottom of the opinion sheet teachers were asked to indicate whether they were male or female. Space was also provided to allow teachers to comment on their reactions to the report card format and the type of information it provided.

Teacher's Letter: The letter to the fifth grade teachers was used primarily to seek their cooperation. It began by questioning the value of school records:

> "How purposeful are permanent record files?" "How revealing are report cards?" "Do they provide information that really helps us understand the pupil as an individual?" All of us educators realize the importance of dealing with students on a one-to-one basis--the importance of establishing a unique, personalized relationship with each child. Does the permanent record file or summary report card facilitate 'getting acquainted'? Can the teacher, confronted with a new class of students, use the files to get a 'head start'?...

The letter then explained that in an attempt to answer these questions, we were examining a variety of report card forms used by school systems. The teacher's reactions would guide us in identifying the best forms. Thus, the letter asked teachers to examine the summary sheet of a fifth grade student and estimate as best as they could four important pieces of pupil information: (1) Pupil's IQ; (2) Pupil's social status with peers; (3) Parental attitudes toward school; and (4) Pupil's future educational accomplishments.

Procedure

A report card with an attached photo, a copy of the letter to the teacher, and an opinion sheet were mailed to each principal.[2] He was asked to consider the materials and, provided they met his approval, forward them to a fifth grade teacher. (If the school had more than one fifth grade teacher, we specified which one should receive the materials. It was either the individual whose name came first, second, or last alphabetically.)

Within two weeks, 60% of the teachers had returned their questionnaires. At that time, a follow-up letter and a set of materials identical to the original set were mailed to each nonrespondent.[3] After another three weeks, data collection was terminated with 441 (87%) returns. Of these, 12 were unanswered for the expressed reason that the school did not have a 5th grade and 22 were simply returned without explanation. Another 3 were eliminated because of incomplete responses. (Thus, the analysis was based on 404 responses.)

The Opinion Sheets completed by the teachers were coded the following way:

IQ	Parental Attitudes Toward School	Child's Educational Attainment	Child's Social Relations
1 = 96-100	1 = strong indifference	1 = 2 yrs. H.S.	1 = very bad
2 = 101-105	2 = moderate indifference	2 = 4 yrs. H.S.	2 = bad
3 = 106-110	3 = slight indifference	3 = 2 yrs. Col. (equiv.)	3 = okay
4 = 111-115	4 = slight interest	4 = 4 yrs. Col.	4 = good
5 = 116-120	5 = moderate interest	5 = 1 yr. Grad. School	5 = very good
6 = 121-125	6 = strong interest	6 = Masters	
7 = 126-130		7 = Ph.D.	

RESULTS

An Index of the teacher's evaluation of the child's Educational Potential was constructed by summing the teacher's score on the IQ, Parental Interest, and Educational Attainment items. (Possible scores ranged from a low of 3 to a high of 18.) The teacher's evaluation of the Child's Social Relations was taken as our index of the teacher's perception of the child's Social Potential. (Possible scores ranged from 1 to 5.)

From the data summarized in Table 1 it is evident that our prediction is confirmed: attractive children have a big advantage over unattractive ones.

TABLE 1

Means and Standard Deviations for Each Item
On the Opinion Sheet

	Students' Educational Potential[1]			Students' Social Potential
	IQ	Parental Interest	Educational Attainment	Peer Relations
Attractive Students	3.33	4.66	3.06	3.54
Unattractive Students	2.98	4.38	2.65	3.25
S.D.	1.10	.99	.95	.73

[1]The higher the score, the more Educational and Social Potential the teacher attributes to the child.

A test based on an index consisting of items 1, 3, and 4 (IQ, parent interest, and future education) of the opinion sheet showed that teachers perceive attractive children to have higher educational potential than unattractive children (F for the Index = 19.60, 1/402 df, $p < .01$) An analysis of each item individually indicated that the impact of physical attractiveness was evidenced on each item: IQ[4] (F = 10.53, $p < .001$), Future education of the child (F = 18.67, $p < .001$), and Parent Interest in Academic Achievement (F = 18.67, $p < .01$).

Teachers also expect beautiful children to have far better relations with their peers than do unattractive children (F = 15.04, $p < .001$). In assuming that Beauty breeds popularity, teachers are undoubtedly perceiving reality clearly. A variety of experiments have shown that beauty is an important indicant of how well students will be liked by others (Walster et al., 1966; Brislin & Lewis, 1968; Walster et al., 1971).

Additional Data Snooping:

In this experiment, we were primarily interested in the attractiveness main effect on the composite measure of Perceived Educational Potential. Thus, we have limited the formal statistical analysis to a test of this effect. It is well known that very different statistical methods are required (such as Scheffe's method for multiple comparisons) if one is going to indulge in an examination

of a number of hypotheses in a single experiment. In view of the fact that this experiment was not designed to investigate additional questions (the test of the four degrees of freedom source containing all the interactions would have required a sample size in excess of 1,400 observations given the authors' constraints on power) the results that follow should be viewed as anecdotal, for the interest of readers who may be contemplating additional work in the area, and definitely not conclusive.

A review of educational literature on sex differences suggested some additional speculations:

1. Although researchers have frequently failed to find significant differences between girls' and boys' IQ's (McNemar, 1942; Havinghurst & Janke, 1944; Hughes, 1953), there is evidence that girls over-achieve more frequently than do boys (Phillips, 1962; Schmuck & Van Egmond, 1965). Therefore, given a standardized report card from which to estimate IQ, it might be speculated that teachers would indicate a higher IQ when the student was said to be a boy than when the individual was said to be a girl. The data do not support this possibility. Sex of child does not affect the teacher's perception of his IQ ($\underline{F} = 1.44$).

2. On the basis of student ratings, teacher ratings, and behavioral data, boys tend to be more aggressive, more anti-social, and more negativistic than girls (Tuddenham, 1952; Spach, 1951; Sears, 1961; Feshbach, 1956; Sanford, Adkins, Miller, & Cobb, 1943; Digman, 1963). Thus, one might speculate that teachers would rate girls higher than boys on social relations with peers. Our data suggest that such a trend may exist ($\underline{F} = 4.80$, 1 and 396 $\underline{df}$). We cannot have any confidence in this posteori "finding" until it is replicated, however.

3. Finally, boys might be expected to attain higher levels in education than girls. That males continue their education longer than females is a statistical fact, is expected by parents (Aberle & Naegele, 1953), and is insured by discriminatory admission committees (Walster, Cleary, & Clifford, 1971). Thus, teachers might be expected to predict that males are more likely to pursue higher educational degrees than females. There is, however, no evidence that the child's sex did influence teachers' expectations ($\underline{F} = .95$) with respect to future education. Figure 1 presents graphically the differences in teachers' expectations for attractive and unattractive boys and girls

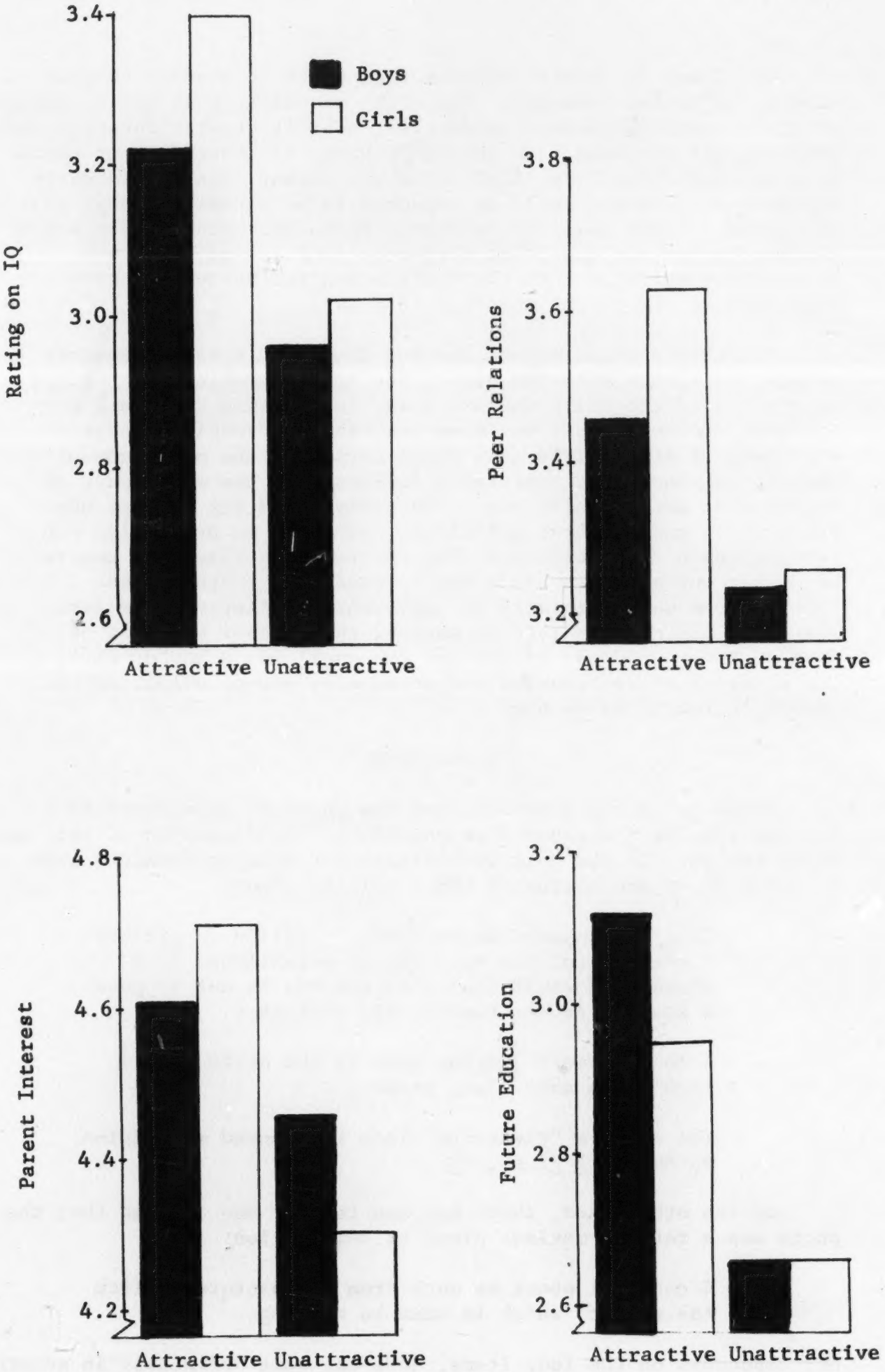

Figure 1 Mean Responses of Teachers

4. There is little evidence from which to predict teacher ratings on parent interest. One might speculate that girls, because of their over-achievement tendencies, solicit greater parental concern and satisfaction. On the other hand, if indeed higher education is considered more vital for boys, parent interest in early academic achievement could be expected to be higher for boys than for girls. There seems to be little basis on which to make a sex prediction for this dependent variable. And indeed, our data provides no evidence that the child's sex influenced teachers' expectations for parent interest ($F = .99$).

The reader might wonder whether the child's attractiveness interacted either with the Sex of the teacher making the ratings or the Sex of the child who was being rated. One might ask for example, whether beauty was more important in shaping teachers' expectations about girls than about boys. Or one might wonder whether teachers were especially impressed by the appearance of children of the opposite sex. The analyses we set up were not designed to answer these questions. (We made no prediction concerning these interactions.) For the reader's interest, however, we re-ran our analyses--in order to determine whether these interactions were trivially or importantly different from zero. They were not. Regardless of whether the teacher was male or female, and regardless of whether the pupil was a boy or girl, the physical attractiveness had an equally strong effect on his teacher's reactions to him.

DISCUSSION

There is little question that the physical appearance of a student affects a teacher's expectations. Confirmation of this was found not only in the data we analyzed but also in comments made by teachers at the bottom of their opinion sheet:

> This boy appears to be slightly sullen in picture. I realize not too much can be established by a picture--I would feel that the boy is not as good a student as the report card indicates.

> I found myself judging much on the photo when I wasn't too sure of my answer.

> The child's "clean-cut" look influenced my opinion on number 1 /i.e., IQ/.

On the other hand, there was one teacher who implied that the photo was a totally useless piece of information:

> I can tell about as much from the picture as from the report, which is next to nothing.

Her responses on the four items, however, were definitely in accord with the means for the unattractive male--the photo attached to the report card she evaluated.

Some teachers carefully justified their responses on the basis of the changes in the child's grades over the six marking periods. One individual who gave a low rating (a score of 2) on parent attitude commented,

> Her /the child's/ general attitude, shown by check marks, indicates parental neglect of these same habits at home.

Another teacher, who rated a child high (a score of 5) on this same item focused on the final grading period and explained,

> If the child's grades hadn't improved in the 6th mark period, I would be inclined to say that her parents were indifferent.

The first of these two raters was evaluating an unattractive girl, while the second teacher was evaluating an attractive girl.

With the increasing concern for the multiplicity of factors which affect the child's scholastic performance, studies such as this which suggest sources of bias are important. Educators, as well as parents will want to be sensitive to the unusual impact a child's attractiveness has on the way he will be treated by others. Unlike such biasing factors as race or SES, many of the variables which contribute to physical attractiveness can probably be manipulated with relatively little difficulty. But where the parent and/or child are unable or unwilling to control attractiveness, teachers will want to make certain that the child's physical features do not operate as an unwarranted detriment to his intellectual development.

Since the unattractive child is likely to be continually discriminated against in daily life, teachers may wish to provide him with some compensating attention. By recognizing that their natural instincts may well incline them to expect more from the beautiful child and to treat him with special respect, teachers may wish to make a conscious effort to accord the unattractive child the attention and respect of which he is all too often deprived.

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FOOTNOTES

[1]This research was financed in part by NIMH Grant MH 1661, NSF Grant GS 2932, and HEW Grant OEG-6-70-0043 (508).

[2]Materials could not be sent directly to teachers because their names were not included in the school directory.

[3]Nonrespondents were identified by coding techniques used on opinion forms.

[4]The reader may be curious as to what the actual IQ's of the attractive and unattractive males and females were. IQ scores could be secured for only one attractive girl and five of the male students. The IQ's of the Unattractive boys averaged 136 (134 and 138); the IQ's of the Attractive boys averaged 117 (103, 115, and 133).